

ABSTRACT OF THE DISCLOSURE

A method and apparatus are provided for the repair of an amplitude defect in a multilayer coating. A significant number of layers underneath the amplitude defect are undamaged. The repair technique restores the local reflectivity of the coating by physically removing the defect and leaving a wide, shallow crater that exposes the underlying intact layers. The particle, pit or scratch is first removed the remaining damaged region is etched away without disturbing the intact underlying layers.

1. A method for repairing an amplitude defect in a multilayer coating, comprising: removing a particle, pit or scratch from the coating; etching away the remaining damaged region of the coating; and leaving a wide, shallow crater that exposes the underlying intact layers.